UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,661	02/15/2007	Yoav Bar-Yaakov	0-06-112	5008

42009 7590 05/07/2010

KEVIN D. MCCARTHY
ROACH BROWN MCCARTHY & GRUBER, P.C.
424 MAIN STREET
1920 LIBERTY BUILDING
BUFFALO, NY 14202

EXAMINER	
BUIE-HATCHER, NICOLE M	
ART UNIT	**PAPER NUMBER**
1796	

MAIL DATE	DELIVERY MODE
05/07/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,661	BAR-YAAKOV ET AL.	
	Examiner	Art Unit	
	NICOLE M. BUIE-HATCHER	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-21,25 and 27-38* is/are pending in the application.

4a) Of the above claim(s) *14-21 and 32-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-13,25,27-31,37, and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed 02/01/2010 has been entered. Claims 1-4, 6-21, 25, and 27-36 remain pending. Claims 14-21 and 32-36 were previously withdrawn. Claims 37 and 38 have been added.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6-13, 25, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Georlette et al. (US 4,849,134) in view of Kitahara et al. (US 6,503,988 B1).

Regarding claims 1-4, 6, 25, and 27, Georlette et al. discloses granular flame retardant agents containing one or more halogenated hydrocarbon flame retardant compounds (C2/L8-15).

The halogenated hydrocarbon flame retardant compounds comprise decabromodiphenyl ether, tetrabromobisphenol A and its derivatives, tetrabromobisphenol A bis(allyl ether), bis(tribromophenoxy)ethane, and poly(pentabromobenzylacrylate) (C2/L45-C3/L9). Georlette et al. discloses additives which can be admixed with the flame retardant composition (C2/L37-44), including anti-dripping agents (claim 5). Since the additives and the flame retardant compounds are mixed (C2/L37-44), the composition will be evenly dispersed, absent objective evidence to the contrary.

However, Georlette et al. does not disclose a fluoropolymer. Kitahara et al. teaches polytetrafluoroethylene fine powder as antidripping agents (C2/L50-61). Georlette et al. and Kitahara et al. are analogous art concerned with the same field of endeavor, namely flame-retardant plastic materials. It would have been obvious to one of ordinary skill in the art at the time of invention to add the polytetrafluoroethylene of Kitahara et al. in a composition of Georlette et al., and the motivation to do so would have been as Kitahara et al. suggests using antidripping agents excellent in handling characteristics and dispersibility while maintaining antidripping property (C2/L41-45).

Regarding the method limitations, the examiner notes that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated *in Thorpe*, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. *In re Pilkington*, 411 F. 2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as

or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process). See MPEP § 2113.

Regarding claim(s) 7, 8, 28, and 29, Georlette et al. does not disclose amount of antidripping agent. As the antidripping effect in the final thermoplastic composition is variable that can be modified by adjusting said amount of antidripping agent, the precise amount of antidripping agent would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, amount of antidripping agent, and the motivation to do so would have been to obtain desired antidripping effect in the final thermoplastic composition (*In re Boesch*, 617 F .2d. 272,205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See MPEP 2144.05.

Regarding claims 9, 12, 13, and 30, since the flame retardants are the same as the preferred examples in the instant specification (See [0026] of the corresponding PG Pub), the flame retardants have a melting point below 300°C and melt viscosity lower than 2000 cp, absent objective to the contrary.

Regarding the method limitations recited in claim(s) 10 and 31 wherein the flame retardant is obtained from precursors having a melting point below 300°C, the examiner notes that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated *in Thorpe*, 777 F.2d at 697, 227 USPQ at

966 (The patentability of a product does not depend on its method of production. *In re Pilkington*, 411 F. 2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process). See MPEP § 2113.

Regarding claim 11, Georlette et al. discloses additives, such as lubricants and thermal stabilizers (C2/L37-44).

Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Georlette et al. (US 4,849,134) in view of Kitahara et al. (US 6,503,988 B1) as applied to claims 6 and 27 above, and further in view of Hatayama et al. (US 5,290,835).

Regarding claims 37 and 38, modified Georlette et al. discloses a composition as shown above in claims 6 and 27. Georlette et al. discloses one or more halogenated hydrocarbon flame retardant compounds (C2/L8-15). In Example 11, poly(butyleneterephtalate) is used as flammable plastic.

However, modified Georlette et al. does not disclose a flame retardant which based on a brominated epoxy resin. Hatayama et al. teaches a brominated bisphenol A type epoxy resin (C2/L18-39). Modified Georlette et al. and Hatayama et al. are analogous art concerned with the same field of endeavor, namely flame retardant compositions comprising poly(butyleneterephthalate). It would have been obvious to one of ordinary skill in the art at the time of invention to substitute the flame retardant of modified Georlette et al. with a flame retardant per the teachings of Hatayama et al., and the motivation to do so would have been as

Hatayama et al. suggests for imparting poly(butyleneterephtalate) compositions with high fluidity.

Response to Arguments

Applicant's arguments filed 02/01/2010 have been fully considered and they are substantially persuasive. The following comment(s) apply:

A) Applicant has indicated in instant claim 1, the term "fluoropolymer powder" has replaced the term "solid fluoropolymer". However, in claim 1, "solid" has not been deleted and "powder" is added.

B) The previous 35 USC 112, first paragraph rejection of claims 1-4, 6-3, 25, and 27-31 is withdrawn in light of Applicant's response on pages 1 and 2.

C) Applicant's argument that Georlette does not teach any evenly dispersed antidripping agent, but a cold-compacted composition of flame retardants (page 2) is not persuasive. Regarding the method limitations, the examiner notes that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated *in Thorpe*, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. *In re Pilkington*, 411 F. 2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process). See MPEP § 2113. Since the components of the granular flame retardant of

Georlette et al. in view of Kitahara et al, the composition is evenly dispersed as shown above in claim 1. Georlette teaches a fine distribution (C3/L40-65).

D) Applicant's argument that no even dispersion of the antidripping agents in the flame retardants can be achieved (page 2) is not persuasive. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). See MPEP § 716.01 (c).

E) Claim 31 was inadvertently not added to limitations as for claim 10 as shown above.

F) The claims rejected under 35 USC 103(a) over Georlette et al. in view of Kitahara et al. have all been placed in the statement of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE-HATCHER whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/N. M. B./
Examiner, Art Unit 1796
4/30/2010